

ABSTRACT OF THE DISCLOSURE

5. The present invention is generally directed to
the evolution of new metabolic pathways and the
enhancement of bioprocessing through a process herein
termed recursive sequence recombination. Recursive
sequence recombination entails performing iterative
cycles of recombination and screening or selection to
10 "evolve" individual genes, whole plasmids or viruses,
multigene clusters, or even whole genomes. Such
techniques do not require the extensive analysis and
computation required by conventional methods for
metabolic engineering.